

D. Remarks

The claims are 1 and 4-20, with claims 1, 19 and 20 being independent. Claim 19 has been withdrawn from consideration as being directed to a non-elected invention. Claims 2 and 3 have been cancelled without prejudice or disclaimer of the subject matter recited therein. Claims 1 and 20 been amended to include the subject matter of cancelled claims 2 and 3 and to better define the present invention. Support for this amendment may be found, inter alia, in the specification at paragraph [0032]. Claims 4, 6, 7, 10, 11, 12, 14 and 16-18 have been amended to reflect the changes in claim 1 and/or to improve their form. A Substitute Specification has been prepared, and is submitted herewith, to correct clear typographical, grammatical and syntax errors in order to conform the text better with proper idiomatic English. No new matter has been added. Reconsideration of the present claims is expressly requested.

The application is objected to for allegedly not complying with 37 C.F.R. § 1.821 through 37 C.F.R. § 1.825, because it lacks any submission of a computer readable form for sequence listings, which are presented throughout the specification.

In response, Applicants are submitting herewith a sequence listing and a computer readable form. Therefore, this objection should be withdrawn.

Claims 1-18 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite. Specifically, the Examiner alleged that claims 1 and 20 are not clear and are replete with grammatical and idiomatic errors.

Applicants respectfully submit that the above amendments to claims 1 and 20 obviate the rejection. Accordingly, this rejection should be withdrawn.

Claims 1-18 and 20 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from H.F. Arlinghaus et al., "TOF-SIMS Characterization of DNA and PNA Biosensor Chips," Proceedings of the 12th International Conference on Secondary Ion Mass Spectrometry, pp. 951-954 (September 1999) (Arlinghaus) in view of U.S. Patent No. 6,137,110 (Pellin). The grounds of rejection are respectfully traversed.

The presently claimed invention, in pertinent part, is related to a method and apparatus for acquiring information from a device, such as a biochip. This information is obtained by irradiating the device in a discontinuous pattern, which is either random or specifically programmed, so that the influence of the charge-up of the irradiated area is suppressed. Duplicate irradiation of a unit area with the primary ion beam is avoided.

Arlinghaus is directed to a DNA sequencing method. The Examiner has alleged that since Arlinghaus explores the homogeneity of samples immobilized on a chip surface through a TOF-SIM process, in order to explore the potential distribution of the samples one of skill in the art must irradiate the surface of the chip in a pattern in order to determine what surface regions contain a sample and what regions do not contain a sample. The Examiner deemed such a procedure to read on the discontinuous pattern as presently claimed.

In order for the Examiner's allegations to serve as the basis for this rejection, the beam in Arlinghaus must inherently be irradiated in a pattern, which, in turn, must inherently be discontinuous. Applicants respectfully submit that Arlinghaus does not meet the required legal standard for establishing inherency.

In order to show inherency, the Examiner must present rationale or evidence that makes “clear that the missing descriptive matter is necessarily present in the thing described in the reference.” In re Robertson, 49 U.S.P.Q2d (BNA) 1949, 1950 (Fed. Cir. 1999); see M.P.E.P. § 2112. As a matter of law, “[i]nherency . . . may not be established by probabilities or possibilities [, and the] mere fact that a certain thing may result from a given set of circumstances is not sufficient.” In re Robertson, 49 U.S.P.Q2d at 1951.

Thus, to support an inherency argument, the scanning in Arlinghaus must necessarily be in a discontinuous pattern. Applicants respectfully submit that this is not the case.

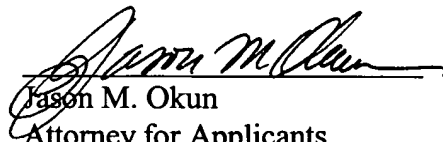
Specifically, the Examiner will note that the instant specification, at paragraph [0020], mentions a biochip may be subjected to raster scanning. Raster scanning, however, is not discontinuous. Thus, Applicants respectfully submit that the scanning pattern to determine what surface regions contain a sample and what regions do not contain a sample is not inherently discontinuous, as it may be conducted using raster scanning. In fact, Applicants submit that a person skilled in the art would be motivated to conduct a continuous scan for the purpose mentioned in Arlinghaus.

In view of the above, Arlinghaus clearly does not meet the legal standard for establishing inherency with respect to scanning in a discontinuous pattern. Furthermore, Arlinghaus fails to disclose or suggest a discontinuous scan in which there is no duplicate irradiation of the same unit area in one scan, as presently claimed. Thus, Arlinghaus cannot affect the patentability of the presently claimed invention.

Wherefore, Applicants respectfully request that the outstanding rejections be withdrawn and that the present case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Jason M. Okun", is written over a horizontal line.

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